Incidentally Found Thyroid Nodules Oft Malignant

BY NANCY WALSH
New York Bureau

Chicago — A high rate of malignancy was found in a retrospective review of incidentally discovered thyroid nodules among patients with a history of other cancers, Dr. Scott M. Wilhelm reported at the annual meeting of the Central Surgical Association.

Trend. Thirty-three percent of incidentally discovered nodules reportedly have a 5% malignancy rate, but some studies have suggested that nonpalpable nodules found during other radiographic procedures carry malignancy rates ranging from 8% to 29%.

Office-based ultrasound confirmed the presence of a nodule 1 cm or more in diameter in 35 of 41 patients who were referred for evaluation after CT scans identified thyroid nodules, said Dr. Wilhelm, assistant professor, Case Western Reserve University, Cleveland.

Most (78%) of the patients were female. The primary site was 23 of the patients was gastrointestinal, including colon, pancreas, and small bowel, whereas the primary site was breast in 11 patients and prostate in one.

Three patients had lymphoma, and nine had various other tumors. In some patients, there was more than one primary tumor, Dr. Wilhelm said.

The remaining six patients had nodules that were smaller than 1 cm or had no nodules, and were considered to represent false-positive CT scans.

Biopsy results were benign in 13 (42.8%) of the 31 patients in whom biopsy was performed. In three patients, malignancy was suspected, but the two levels had different effects on calcium absorption, raises [bone mineral density] levels, decreased risk of fractures, and reduced serum parathyroid hormone levels.

Vitamin D Deficiency Occurs Even When Marker Is ‘Normal’

BY BARBARA RUTLEDGE
Contributing Writer

Tampa — Vitamin D deficiency is high- ly prevalent, even in patients whose 25-hydroxyvitamin D levels are within the ‘normal’ range, Dr. Robert P. Heaney said at the annual meeting of the International Society for Clinical Densitometry.

That’s because the reference range for serum 25-hydroxyvitamin D (25(OH)D) levels is too low, said Dr. Heaney of Creighton University, Omaha, Neb. “Within the reference range, there is malabsorption of calcium and preventable fractures. There are as much expressions of nutritional deficiency as are the bleeding gums of scurvy.”

The Institute of Medicine reevaluated the nutrient intake recommendations for bone-related nutrients, including vitamin D, in the mid-1990s. The role of vitamin D intake in preventing rickets has long been recognized, and it was known that vitamin D was necessary for calcium absorption.

Ten years ago, the unknowns were the vitamin D intake for optimal calcium absorption, possible links between vitamin D and colon cancer, and how to determine whether a patient’s intake was sufficient.

“We’ve learned a lot since then,” said Dr. Heaney. “We know that 25(OH)D is the functional status indicator, and we know that at levels below 20 nmol/L or 8 ng/mL, we get rickets and osteomalacia.”

The controversy lies in deciding where the normal range of serum 25(OH)D should be for optimal bone health. Although the low end of the reference range may vary from 38 to 50 nmol/L, an individual is at risk for osteoporosis at serum 25(OH)D levels below 80 nmol/L, according to Dr. Heaney, who argues that normal levels of serum 25(OH)D begin at 80 nmol/L. At levels between 20 and 80 nmol/L, increased bone remodeling, reduced calcium absorption, increased risk of falls, and increased risk of fractures occur.

Individuals might have inadequate vitamin D status even when serum 25(OH)D levels are well within the reference range. A study Dr. Heaney and colleagues conducted assessed serum 25(OH)D levels and calcium absorption in 34 healthy, postmenopausal women. The study showed that women whose serum 25(OH)D levels were at the lower end of the reference range had lower calcium absorption than women with higher levels.

The study was conducted over 2 consecutive years in Omaha and Nebraska, where serum vitamin D levels would be at their lowest levels. Participants were given oral 500 mg calcium supplements, and calcium absorption and serum 25(OH)D levels were measured. One year, the participants were predosed with vitamin D supplementation, and the other year, they were not (Am. Coll. Nutr. 2005;22:142-6).

Vitamin D supplementation resulted in an increase in serum 25(OH)D from 50 to 83 nmol/L. Both of those values are considered to be within the range, but the two levels had different effects on calcium absorption efficiency.

At the lower serum 25(OH)D level of 50 nmol/L, calcium absorption efficiency was 22%, compared with 37% at the higher serum 25(OH)D level. Higher serum 25(OH)D levels were also associated with higher serum calcium concentrations and decreased serum parathyroid hormone levels.

Other studies have shown higher bone mineral density levels, decreased risk of fractures, or decreased risk of falling with levels of serum 25(OH)D above 80 nmol/L. Within the range of 25(OH)D levels commonly encountered, calcium absorption rises as 25(OH)D rises,” said Dr. Heaney. “I don’t think many people would ever need that much, but it is nice to know that there is a therapeutic margin of safety.”